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EXAMINER	
STORK, KYLE R	

ART UNIT	PAPER NUMBER
2178	

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Please find below and/or attached an Office communication concerning this application or proceeding.

B

Office Action Summary	Application No.	Applicant(s)	
	10/086,478	FAYAN ET AL.	
	Examiner	Art Unit	
	Kyle R. Stork	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This final office action is in response to the amendment filed 9 August 2005.

2. Claims 1-38 are pending. Claims 1, 22-29, and 34-38 are independent claims.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-28, 30-32 and 36-38 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The term "neighborhood" in claims 1, 9, 22-28, 30-32, 36-38 is a relative term which renders the claim indefinite. The term "neighborhood" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention. The specification does assert that "the neighborhood is a specified number of video samples from points in time surrounding the input time. The number of input video samples so specified depends on the resampling function that is used to compute the output video sample." However, it is not possible for one to ascertain the number of samples in a "neighborhood" through the specification. The definition or neighborhood, as disclosed within the specification is indefinite. Similarly, the use of the term neighborhood is indefinite.

Claims 2-8 and 10-21 are rejected based upon their dependence upon a rejected base claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 12, 14, 22-23, 25-32, and 34-38 remain rejected under 35 U.S.C. 102(b) as being anticipated by Baumgartner et al. (US 5642171, 1997, hereafter Baumgartner).

As per independent claim 1, Baumgartner discloses in a system for editing an audiovisual work, a method for producing a retiming effect on a clip of synchronized audio data and video data to produce a retimed clip of synchronized audio and video data in the audiovisual work comprising:

- Associated a definition of a retiming function for a rampable retiming effect that maps output times to input times with the clip of synchronized audio data and video data (Figures 5A specifically items 518-524 and 5B: Here, both the audio and video allow for rampable retiming in order to assure that the two components, audio and video, remain within a synchronization error tolerance; column 6, lines 56-61)

- Processing the synchronized audio data and video data according to the retiming function to produce the retimed clip, wherein processing comprises:
    - For each output time for an audio sample:
        - Determining a corresponding input time for the output time and the retiming function (Figure 5A, items 512 and 514; column 13, lines 27-30 and lines 36-38: Here, the output time is the current frame number while the input time is the "equivalent frame number" which is approximately equal to the video frame at that point)
        - Computing an output audio sample at the output time based on at least the audio data in the neighborhood of the corresponding input time using a resampling function (Figure 5A, items 518 and 522; column 14, lines 18-22: Here, if the audio is synced with the video in the neighborhood of the input time)
    - For each output time for a video sample:
        - Determining a corresponding input time for the output time and the retiming function, such that input times determined for output times for video samples correspond to input times determined for the same output times for audio samples (Figure 5A, item 522; Figure 5B: Here, the video is adjusted to sync with the audio)
        - Computing an output video sample at the output time based on at least the video data in the neighborhood of the corresponding input time using a resampling function (Figure 5B, items 542: Here, if the

error in the synchronization of audio and video is not within a tolerance or neighborhood, then the video is adjusted to allow the audio to catch up until it is within the neighborhood)

As per dependent claim 2, Baumgartner discloses the method wherein the retiming function is defined as a speed curve, and wherein the speed curve is integrated to determine the input times from output times for both video data and audio data, wherein a step size used to compute an integral of the speed curve is less than or equal to a step size corresponding to a sampling rate of the audio data (Figures 5A-5B: Here, the speed curve is the synchronization error quality derived from the expected frame and the current frame. If the synchronization error is within an excepted margin (the step size corresponding to the sampling rate), then the audio or video continues to play, otherwise one is modified to put them back in sync).

As per dependent claim 12, Baumgartner discloses the method wherein an input time determined for any output time for a video sample is identical to an output time determined for the same output time for an audio sample (Figure 6, item 602: Here, the audio and video stream share a common starting point).

As per dependent claim 14, Baumgartner discloses the method wherein the retiming function comprises a mapping of a plurality of video events and a corresponding plurality of audio events to a corresponding plurality of output times (Figures 5A and 5B: Here the audio and video are synced according to the wave rate and the other input (audio or video)).

As per independent claim 22, the applicant discloses the computer program product stored on a computer readable medium for executing the method of claim 1. Claim 22 is similarly rejected under Baumgartner.

As per independent claim 23, the applicant discloses the system for the execution of the method of claim 1. Claim 23 is similarly rejected under Baumgartner.

As per independent claim 25, the applicant discloses the digital entertainment product stored on a computer readable medium for executing the method of claim 1. Claim 25 is similarly rejected under Baumgartner.

As per independent claim 26, the applicant discloses the system for executing the method of claim 1. These limitations are similarly rejected under Baumgartner. The applicant further discloses exporting the audiovisual work to an audio editing system, including the definition of the retiming function, for processing the audio data of the clip according to the retiming function, such that an input time determined for each output time for video samples corresponds to an input time determined for the same output time for audio samples. Baumgartner further discloses exporting the audiovisual work to an audio editing system, including the definition of the retiming function, for processing the audio data of the clip according to the retiming function, such that an input time determined for each output time for video samples corresponds to an input time determined for the same output time for audio samples (Figures 5A-5B).

As per independent claim 27, the applicant discloses the system for execution of the method of claim 1. These limitations are similarly rejected under Baumgartner. The applicant further discloses synchronizing the retimed audio clip with the retimed video

clip in the audiovisual work. Baumgartner further discloses synchronizing the retimed audio clip with the retimed video clip in the audiovisual work (Figures 5A-5B: Here, several calculations and comparisons are made to ensure that the audio and video components are synchronized).

As per independent claim 28, the applicant discloses the system for execution of the method of claim 1. These limitations are similarly rejected under Baumgartner. The applicant further discloses synchronizing the retimed audio clip with the retimed video clip in the audiovisual work. Baumgartner further discloses synchronizing the retimed audio clip with the retimed video clip in the audiovisual work (Figures 5A-5B: Here, several calculations and comparisons are made to ensure that the audio and video components are synchronized).

As per independent claim 29, Baumgartner discloses a system for editing an audiovisual work, a method for defining a retiming effect applied to audio data and video data to produce a retimed clip of synchronized audio and video data in the audiovisual work, comprising:

- Associating a mapping of a plurality of video events in a video data and a corresponding plurality of audio events in the audio data to a corresponding plurality of output times in the retimed clip (Figures 5A-5B)
- Processing the audio data according an audio resampling function that generates each output audio sample from a plurality of input audio samples from the audio data to produce retimed audio data (Figure 5A-5B: Here, the audio and video can be adjusted to sync with the other (video or audio))

- Processing video data according to an audio resampling function that generates each output video sample from a plurality of input video samples from the video data to produce retimed video data (Figure 5A-5B: Here, the audio and video can be adjusted to sync with the other (video or audio))
- Placing the retimed audio data and retimed video data in the audiovisual work as the retimed clip of synchronized audio and video data (Figure 5A-5B: Here, the audio and video are adjusted to maintain synchronization within an excepted range)

As per dependent claim 30, Baumgartner discloses the method wherein processing the audio data comprises computing a position curve for audio from mapping:

- For each output time for an audio sample:
  - Determining a corresponding input time for the output time and the retiming function (Figure 5A, items 512 and 514; column 13, lines 27-30 and lines 36-38: Here, the output time is the current frame number while the input time is the "equivalent frame number" which is approximately equal to the video frame at that point)
  - Computing an output audio sample at the output time based on at least the audio data in the neighborhood of the corresponding input time using the audio resampling function (Figure 5A, items 518 and 522; column 14, lines 18-22: Here, if the audio is synced with the video in the neighborhood of the input time)

As per dependent claim 31, Baumgartner discloses the method wherein processing the video data comprises computing a position curve for video from the mapping:

- For each output time for a video sample:
    - Determining a corresponding input time for the output time and the retiming function, such that input times determined for output times for video samples correspond to input times determined for the same output times for audio samples (Figure 5A, item 522; Figure 5B: Here, the video is adjusted to sync with the audio)
    - Computing an output video sample at the output time based on at least the video data in the neighborhood of the corresponding input time using the video resampling function (Figure 5B, items 542: Here, if the error in the synchronization of audio and video is not within a tolerance or neighborhood, then the video is adjusted to allow the audio to catch up until it is within the neighborhood)

As per dependent claim 32, Baumgartner discloses the method wherein processing the video data comprises computing a position curve for video from the mapping:

- For each output time for a video sample:
    - Determining a corresponding input time for the output time and the retiming function, such that input times determined for output times for video samples correspond to input times determined for the same output

times for audio samples (Figure 5A, item 522; Figure 5B: Here, the video is adjusted to sync with the audio)

- Computing an output video sample at the output time based on at least the video data in the neighborhood of the corresponding input time using the video resampling function (Figure 5B, items 542: Here, if the error in the synchronization of audio and video is not within a tolerance or neighborhood, then the video is adjusted to allow the audio to catch up until it is within the neighborhood)

As per independent claim 34, the applicant discloses the computer program product on a computer readable medium for the execution of the method of claim 29. Claim 34 is similarly rejected under Baumgartner.

As per independent claim 35, the applicant discloses the system for the execution of the method of claim 29. Claim 35 is similarly rejected under Baumgartner.

As per independent claim 36, the applicant discloses the limitations similar to those in claim 1. Claim 36 is similarly rejected under Baumgartner. In Baumgartner, the first stream is audio while the second stream is video.

As per independent claim 37, the applicant discloses the limitations similar to those in claim 1. Claim 37 is similarly rejected under Baumgartner. In Baumgartner, the first stream is audio while the second stream is video.

As per independent claim 38, the applicant discloses the limitations similar to those in claim 1. Claim 38 is similarly rejected under Baumgartner. In Baumgartner, the temporal media data is audio and video data. The metadata is subsequently time.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 3, 5-6, and 8 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner in further in view of Levine et al. ("A Sines+Transients+Noise Audio Representation for Data Compression and Time/Pitch Scale Modification," 1998, hereafter Levine).

As per dependent claim 3, Baumgartner discloses the limitations similar to those in claim 1, and the same rejection is incorporated herein. Baumgartner fails to specifically disclose the method wherein determining the output audio sample uses a time-scaling function. Levine discloses the method wherein determining the output audio sample uses a time-scaling function (page 1, Introduction: Here, time-scaling is used in conjunction with the MPEG-4 specification).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Baumgartner's method for synchronization with Levine's method of using time-scaling, since it would have allowed a user to compress the audio and visual data (Levine: page 1).

As per dependent claim 5, Baumgartner and Levine disclose the limitations similar to those in claim 3, and the same rejection is incorporated herein. Baumgartner

further discloses the method wherein determining the output video sample uses blended frames (Figure 5B, item 532; column 14, lines 53-62: Here, a smoothing function blends frames).

As per dependent claim 6, Baumgartner discloses the limitations similar to those in claim 1, and the same rejection is incorporated herein. Baumgartner fails to specifically disclose the method wherein determining the output audio sample uses a resampling function with pitch shifting. Levine discloses the method wherein determining the output audio sample uses a resampling function with pitch shifting (page 1, Introduction: Here, pitch shifting is used in conjunction with the MPEG-4 specification).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Baumgartner's method for synchronization with Levine's method of using pitch shifting, since it would have allowed a user to compress the audio and visual data (Levine: page 1).

As per dependent claim 8, Baumgartner and Levine disclose the limitations similar to those in claim 6, and the same rejection is incorporated herein. Baumgartner further discloses the method wherein determining the output video sample uses blended frames (Figure 5B, item 532; column 14, lines 53-62: Here, a smoothing function blends frames).

10. Claims 4 and 7 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner and Levine in further in view of Cornog et al. (US 6665450, application 2000, hereafter Cornog).

As per dependent claim 4, Baumgartner and Levine disclose the limitations similar to those in claim 3, and the same rejection is incorporated herein. Baumgartner and Levine fail to specifically disclose the method using motion based interpolation. Cornog discloses the method using motion based interpolation (column 6, lines 5-16).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Baumgartner and Levine's method of synchronization with Cornog's method of using motion based interpolation, since it would have allowed a user to view video in slow motion and reverse (Cornog: column 6, lines 5-16).

As per dependent claim 7, Baumgartner and Levine disclose the limitations similar to those in claim 6, and the same rejection is incorporated herein. Baumgartner and Levine fail to specifically disclose the method using motion based interpolation. Cornog discloses the method using motion based interpolation (column 6, lines 5-16).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Baumgartner and Levine's method of synchronization with Cornog's method of using motion based interpolation, since it would have allowed a user to view video in slow motion and reverse (Cornog: column 6, lines 5-16).

11. Claims 9, 15, and 17 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner in further in view of Shapiro et al. (Computer Vision, 2001; hereafter Shapiro).

As per dependent claim 9, Baumgartner discloses the limitations similar to those in claim 1, and the same rejection is incorporated herein. While Baumgartner discloses using a neighborhood, Baumgartner fails to specifically disclose the method wherein the neighborhood of the corresponding input time is a plurality of samples from points in time surrounding the input time. Shapiro discloses the method wherein the neighborhood of the corresponding input time is a plurality of samples from points in time surrounding the input time (page 321-324, Segmentation Using Motion Coherence: Here, motion vectors are computed across frames).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Baumgartner's method of audio video editing with Shapiro's method of using samples from points in time surrounding the input time, since it would have allowed a user to calculate motion between frames (Shapiro: page 324).

As per dependent claim 15, Baumgartner and Shapiro disclose the limitations similar to those in claim 9, and the same rejection is incorporated herein. Baumgartner discloses the method further comprising computing a position curve for audio from the mapping, and wherein determining an input time from an output time for an audio sample uses the position curve (Figure 5A, items 510-A: Here, the current audio frame

is compared to the audio frame position for the time. The audio or video is then paused or slowed in order to sync with the other (audio or video)).

As per dependent claim 17, Baumgartner and Shapiro disclose the limitations similar to those in claim 9, and the same rejection is incorporated herein. Baumgartner discloses the method further comprising computing a position curve for video from the mapping, and wherein determining an input time from an output time for an video sample uses the position curve (Figure 5A, items 510-A: Here, the current audio frame is compared to the audio frame position for the time. The audio or video is then paused or slowed in order to sync with the other (audio or video)).

12. Claims 10-11 and 16 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner and Shapiro in further in view of Fay et al. (US 2002/0143547, application 2001, hereafter Fay).

As per dependent claim 10, Baumgartner and Shapiro disclose the limitations similar to those in claim 9, and the same rejection is incorporated herein. Baumgartner and Shapiro fail to specifically disclose the method wherein the audio re-sampling function generates an audio output sample from a plurality of input audio samples by combining information from a plurality of input audio samples. Fay discloses the method wherein the audio re-sampling function generates an audio output sample from a plurality of input audio samples by combining information from a plurality of input audio samples (Figure 4, items 402 and 408: Here, audio content is received from audio sources and audio data is generated from these sources).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Baumgartner and Shapiro's method of editing with Fay's method of audio sampling, since it would have allowed a user to obtain a sound from several audio channels.

As per dependent claim 11, Baumgartner and Shapiro disclose the limitations similar to those in claim 9, and the same rejection is incorporated herein. Baumgartner and Shapiro fail to specifically disclose the method wherein the video re-sampling function generates an video output sample from a plurality of input video samples by combining information from a plurality of input video samples. Fay discloses the method wherein the re-sampling function generates an output sample from a plurality of input samples by combining information from a plurality of input samples (Figure 4, items 402 and 408.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Baumgartner and Shapiro's method of editing with Fay's method of video sampling, since it would have allowed a user to obtain a sound from several video channels.

As per dependent claim 16, Baumgartner, Shapiro, and Fay disclose the limitations similar to those in claim 10, and the same rejection is incorporated herein. Baumgartner discloses the method further comprising computing a position curve for video from the mapping, and wherein determining an input time from an output time for an video sample uses the position curve (Figure 5A, items 510-A: Here, the current

audio frame is compared to the audio frame position for the time. The audio or video is then paused or slowed in order to sync with the other (audio or video)).

13. Claims 13, 24, and 33 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner in further in view of Boezeman (US 6188396, 2001, hereafter Boezeman).

As per dependent claim 13, Baumgartner discloses the limitations similar to those in claim 1, and the same rejection is incorporated herein. Baumgartner fails to specifically disclose the method wherein an input time determined for each output time for video samples is offset from an input time determined for the same output time for audio samples. Boezeman disclose the method wherein an input time determined for each output time for video samples is offset from an input time determined for the same output time for audio samples (column 2, lines 51-57: Here, the meet-tool allows for an offset between the beginning of the audio and the beginning of the video, with both coming into sync at the end time of each clip).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Baumgartner's method of editing with Boezeman's method of using offsets, since it would have allowed a user to sync audio with video despite the audio clip being longer than the corresponding video clip.

As per independent claim 24, Baumgartner discloses an editing system for editing an audiovisual work and for producing a retiming effect on a clip of synchronized

audio data and video data to produce a retimed clip of synchronized audio and video data in the audiovisual work, comprising:

- An audio retiming module having an input for receiving the definition of the retiming function and an input for receiving the audio data, and an output providing the retimed audio data, such that for each output time for an audio sample, an output audio sample is computer using a resample function based on at least the audio data in a neighborhood of a corresponding input time according to the retiming function (Figure 5A, items 512 and 514; column 13, lines 27-30 and lines 36-38: Here, the output time is the current frame number while the input time is the "equivalent frame number" which is approximately equal to the video frame at that point; Figure 5A, items 518 and 522; column 14, lines 18-22: Here, if the audio is synced with the video in the neighborhood of the input time)
- A video retiming module having an input for receiving the definition of the retiming function and an input for receiving the video data, and an output providing the retimed video data, such that for each output time for an video sample, an output video sample is computer using a resample function based on at least the video data in a neighborhood of a corresponding input time according to the retiming function (Figure 5A, items 512 and 514; column 13, lines 27-30 and lines 36-38: Here, the output time is the current frame number while the input time is the "equivalent frame number" which is approximately equal to the video frame at that point; Figure 5A, items 518 and 522; column 14, lines 18-22: Here, if the audio is synced with the video in the neighborhood of the input time)

Baumgartner fails to specifically disclose an editing interface allowing a user to associate a definition of a retiming function for a rampable retiming effect that maps output times to input times with the clip of synchronized audio data and video data. Boezeman discloses an editing interface allowing a user to associate a definition of a retiming function for a rampable retiming effect that maps output times to input times with the clip of synchronized audio data and video data (Figure 12; column 2, lines 41-61).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Baumgartner's system for editing with Boezeman's system for presenting a user interface, since it would have allowed a user to specify the audio and video clips to be synchronized.

As per dependent claim 33, Baumgartner discloses the limitations similar to those in claim 29, and the same rejection is incorporated herein. Baumgartner fails to specifically disclose the method further comprising receiving an indication of the mapping by:

- Presenting a graphical user interface including a video track, an audio track, and an output track
- Receiving an indication of a video event on the video track through an input device
- Receiving an indication of an audio event on the audio track through an input device

- Receiving an indication of an output time on the output track through the input device
- Maintaining information indicating a correspondence between the indicated video event, the indicated audio event and the indicated output time

However, Boezeman discloses the method further comprising receiving an indication of the mapping by:

- Presenting a graphical user interface including a video track, an audio track, and an output track (Figure 2: Here, Figure 2 is an example of the GUI)
- Receiving an indication of a video event on the video track through an input device (Figure 12: Here, VideoPlay is the video track)
- Receiving an indication of an audio event on the audio track through an input device (Figure 12: Here, AudioPlay is the audio track)
- Receiving an indication of an output time on the output track through the input device (Figure 12: Here, the sequence editor is used to generate an output track. The output time is represented by the vertical marks directly below the "clicked" drop down menu)
- Maintaining information indicating a correspondence between the indicated video event, the indicated audio event and the indicated output time (Figure 12: Here, the audio, video, and output time are all indicated on the same GUI)

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Baumgartner's method of editing with Boezeman's method for editing, since it would have allowed a user to specify the audio and video parameters with respect to time.

14. Claims 18-21 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgartner and Shapiro in further in view of Boezeman.

As per dependent claim 18, Baumgartner and Shapiro disclose the limitations similar to those in claim 9, and the same rejection is incorporated herein. Baumgartner and Shapiro fail to specifically disclose the method further comprising receiving an indication of the mapping by:

- Presenting a graphical user interface including a video track, an audio track, and an output track
- Receiving an indication of a video event on the video track through an input device
- Receiving an indication of an audio event on the audio track through an input device
- Receiving an indication of an output time on the output track through the input device
- Maintaining information indicating a correspondence between the indicated video event, the indicated audio event and the indicated output time

However, Boezeman discloses the method further comprising receiving an indication of the mapping by:

- Presenting a graphical user interface including a video track, an audio track, and an output track (Figure 2: Here, Figure 2 is an example of the GUI)
- Receiving an indication of a video event on the video track through an input device (Figure 12: Here, VideoPlay is the video track)
- Receiving an indication of an audio event on the audio track through an input device (Figure 12: Here, AudioPlay is the audio track)
- Receiving an indication of an output time on the output track through the input device (Figure 12: Here, the sequence editor is used to generate an output track. The output time is represented by the vertical marks directly below the "clicked" drop down menu)
- Maintaining information indicating a correspondence between the indicated video event, the indicated audio event and the indicated output time (Figure 12: Here, the audio, video, and output time are all indicated on the same GUI)

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Baumgartner and Shapiro's method of editing with Boezeman's method for editing, since it would have allowed a user to specify the audio and video parameters with respect to time.

As per dependent claim 19, Baumgartner, Shapiro, and Boezeman disclose the limitations similar to those in claim 18, and the same rejection is incorporated herein. Baumgartner discloses the method further comprising computing a position curve for audio from the mapping, and wherein determining an input time from an output time for an audio sample uses the position curve (Figure 5A, items 510-A: Here, the current audio frame is compared to the audio frame position for the time. The audio or video is then paused or slowed in order to sync with the other (audio or video)).

As per dependent claim 20, Baumgartner, Shapiro, Boezeman disclose the limitations similar to those in claim 19, and the same rejection is incorporated herein. Baumgartner discloses the method further comprising computing a position curve for video from the mapping, and wherein determining an input time from an output time for an video sample uses the position curve (Figure 5A, items 510-A: Here, the current audio frame is compared to the audio frame position for the time. The audio or video is then paused or slowed in order to sync with the other (audio or video)).

As per dependent claim 21, Baumgartner, Shapiro, and Boezeman disclose the limitations similar to those in claim 18, and the same rejection is incorporated herein. Baumgartner discloses the method further comprising computing a position curve for video from the mapping, and wherein determining an input time from an output time for an video sample uses the position curve (Figure 5A, items 510-A: Here, the current audio frame is compared to the audio frame position for the time. The audio or video is then paused or slowed in order to sync with the other (audio or video)).

Response to Arguments

15. Applicant's arguments filed 9 August 2005 have been fully considered but they are not persuasive.

The applicant argues that, "Baumgartner does not teach computing output audio or video samples using audio or video data and a resampling function (page 17, paragraph 2)." The examiner respectfully disagrees. Baumgartner teaches synchronization of media based upon media position (column 6, lines 39-55). A video drive determines the current video frame while an audio driver obtains an audio position (column 6, lines 39-55). The synchronization error is determined by the difference between the audio frame and the video frame (column 6, lines 39-65). The appropriate drive (audio or video) is then assigned a tempo value, used to adjust the tempo of the media in order to re-sync the multi-media presentation (column 6, lines 56-65). Here, determining the adjustment to the tempo value is a resampling function. It generates an output sample (the synced multi-media presentation) from a plurality of input samples (audio and video) at different points in time (the synchronization of the presentation is sampled periodically (column 6, lines 39-41). This argument is not persuasive.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle R. Stork whose telephone number is (571) 272-4130. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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krs

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PRIMARY EXAMINER